Atty. Docket No.: PU4112US2 S/N 10/038,694

REMARKS

Claims 9-19 are pending in this application. The Examiner has rejected claims 9-19 under 35 U.S.C. 112 first paragraph as failing to comply with the written description requirement by reciting in the claims "fragments and derivatives "of SZP. Applicants have amended the language of the claims, deleting the references to SZP "fragments and derivatives."

The Examiner has rejected the claims under 35 USC section 103 (a) as being unpatentable over Rosenberg (US 4,894,440) in view of Warmen et al. (US 2002/0137894, Flannery et al and Chubinskaya et al (US 2002/0052358).

The Examiner states that Rosenberg teaches MS purified to homogeneity from serum-free conditioned medium obtained from cultured human embryonic kidney cells. The Examiner also states that MSF is referenced in the art as SZP and proteoglycan 4. The Examiner notes that Rosenberg does not teach the use of chondrocytes.

According to the Examiner's rejection, Warmen et al. teach CACP is the same as MSF and shows that chondrocytes make SZP, describe SZP as the bovine ortholog of CACP and shows that chondrocytes make CACP. According to the rejection, this suggests that "bovine chondrocytes would make SZP." The Office Action also states Flannery teaches SZP may be purified from bovine chondrocytes and Chubinskaya teaches immortalized/non-immortalized mammalian chondrocytes. The Examiner combines the references to conclude "it would have been obvious to the person of ordinary skill in the art at the time the invention was made to use immortalized or non-immortalized chondrocytes in the method of Rosenberg et al."

Similarly claims 11-19 are rejected under 35 USC section 103 (a) as being unpatentable over Rosenberg (US 4,894,440) in view of Turner (US 2002/137894). The Examiner states Rosenberg does not expressly teach exogenous expression of MSF in cultured cells but suggests the MSF may be produced in genetically engineered organisms, or modified MSF may be produced. The Examiner states Turner teaches genetically engineered MSF for intracellular expression in bacterial host. The Examiner concludes that the references taken together teach the method of claims 11-19.

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Applicants respectfully traverse the rejections. The combination of Rosenberg with other references is improper in that Rosenberg is not relevant art. The term megakaryocyte stimulating factor (MSF) disclosed in Rosenberg is associated with thrombopoeitin and is not the same as the megakaryocyte stimulating factor associated with PRG-4 and SZP. Therefore it would not be obvious for one of ordinary skill in the art to use the methods of Rosenberg in combination with the other cited references to isolate SZP according to applicants' claimed method. Applicants respectfully request the rejection be withdrawn.

Applicants believe that no fees are due in connection with the filing of this paper other than those specifically authorized herewith. However, should any other fees be deemed necessary to effect the timely filing of this paper the Commissioner is hereby authorized to charge such fees to Deposit Account No. 07-1392.

Respectfully submitted,

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Date: August 24, 2004
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